

**BULBOSTYLIS BARBATA, (CYPERACEAE), PREVIOUSLY UNREPORTED
FOR TEXAS**

Stanley D. Jones & J.K. Wipff

S.M. Tracy Herbarium (TAES), Department of Rangeland Ecology and
Management, Texas A&M University, College Station, Texas 77843-2126
U.S.A.

ABSTRACT

Bulbostylis barbata (Rottb.) Clarke in Hook. f., previously unreported in Texas has been found in Newton County.

KEY WORDS: *Bulbostylis*, *Bulbostylis barbata*, Cyperaceae, Texas

There are at least 80 species of *Bulbostylis*, primarily on dry sandy situations in the warm temperate or tropical regions of the world. There are 26 species found in North America (Kral 1971). Four species are now present in Texas: *Bulbostylis barbata* (Rottb.) Clarke in Hook. f., *B. capillaris* (L.) Clarke in Hook. f., *B. ciliatifolia* (Ell.) Fern. var. *coarctata* (Ell.) Kral, and *B. juncooides* (Vahl) Kükenthal. Neither Correll & Johnston (1970), Kral (1971), Gould (1975), nor Hatch *et al.* (1990) have listed *Bulbostylis barbata* as occurring in Texas.

Kral (1971) stated that in North America *Bulbostylis barbata* is essentially a Coastal Plain weed, being a frequent invader of cultivated ground and common enough on sandy fields in late summer to form a reddish brown carpet of inflorescences. He goes on to state that it appears rapidly to be expanding its range in the southeastern United States. This range extension supports his observation. The following key will help differentiate this distinct taxon from the other *Bulbostylis* species in Texas.

KEY TO TEXAS *BULBOSTYLIS*

1. Inflorescence a solitary terminal cluster of hemispherical to globose sessile spikelets; achenes 0.6 mm long or less; scales glabrous and lustrous; plants of the coastal plains, southeast Texas. *B. barbata*

1. Inflorescence a terminal simple or compound, open or compact, umbellate cyme; achenes longer than 0.6 mm; scales puberulent, rarely glabrous, dull not lustrous; plants of west to east Texas, and south. 2
2. Achene faces with conspicuous horizontal lines; achenes conspicuously truncate apically, obtriangular, 0.9-1.5 mm long; plants perennial; plants of the Llano Uplift and of the Trans-Pecos. *B. juncooides*
2. Achene faces with or without horizontal lines, but if present never conspicuous; achenes only slightly if at all truncate apically, obovoid or rarely pyriform, ca. 1 mm long; plants annual; plants from the Trans-Pecos east to the Piney Woods and south to the South Texas Plains. 3
3. Fertile scales broadly obtuse at apex, the tip of the keel reaching the tip of the scale or barely exceeding it; achene faces minutely papillose (use 30X); plants from the Coastal Bend northeast to the Piney Woods. *B. ciliatifolia* var. *coarctata*
3. Fertile scales truncate at apex, the tip of the keel, at most, reaching the base of the notch; achene faces without minute papillae, but with faint horizontal lines; plants from the Trans-Pecos east to the Piney Woods, and south to the South Texas Plains. *B. capillaris*

Specimen collected: UNITED STATES. Texas: Newton Co., ca. 25 m SE from the junction of Hwy 692 and Spur 135 in River Bend, 22 September 1992, *J.K. Wipff 2413 & E.J. Taylor* (BRIT/SMU). It was locally frequent growing on disturbed areas along the W side of a small ditch with running water in strongly acid sand of the Rayburn-Tehran-Kisatchie Association. The elevation of the site is ca. 33 m (110 feet) with the geology being of the Catahoula Formation (Ms) (Oligocene). Associated taxa: *Carex longii* Mackenzie, *Cyperus compressus* L., *C. haspan* L., *C. polystachyos* Rottb., *Dactyloctenium aegyptium* (L.) P. Beauv., *Eleusine indica* (L.) Gaertn., *Fimbristylis miliacea* (L.) Vahl, *Kyllinga odorata* Vahl, *K. pumila* Michx., *Myriophyllum aquaticum* (Vell.) Verd., and *Sacciolepis indica* (L.) Chase.

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